What is claimed is:

1. An apparatus, comprising:

(a) a signal path configured to communicate an RF communications signal disposed in a frequency band; and

(b) a circuit arrangement configured to suppress intermodulation distortion (IMD) products from the RF communications signal by analyzing the signal path to identify at least one active channel among a plurality of channels in the frequency band, identifying at least one portion of the frequency band likely to include IMD products based upon the identified active channel(s), and suppressing from the RF communications signal the IMD products at the identified portion of the frequency band.

2. The apparatus of claim 1, wherein the plurality of channels in the frequency band are each associated with a non-varying carrier frequency.

3. The apparatus of claim 1, wherein the frequency band is the Universal Mobile Telecommunications System (UMTS) frequency band.

4. The apparatus of claim 1, wherein the circuit arrangement is configured to identify each active channel by detecting an active signal at a carrier frequency associated with such active channel.

5. The apparatus of claim 4, wherein the circuit arrangement includes a scanning receiver coupled to the signal path, the scanning receiver configured to be tuned to a selected carrier frequency and to output a power signal representative of the power in the signal path at the selected carrier frequency.

6. The apparatus of claim 5, wherein the circuit arrangement is configured to sequentially tune the scanning receiver to each of a plurality of carrier frequencies, compare the power signal output by the scanning receiver at each carrier frequency to a threshold, and identify an active channel among the plurality of channels based upon the comparison of the

power signal output by the scanning receiver when tuned to a carrier frequency associated with such active channel to the threshold.

7. The apparatus of claim 5, wherein the circuit arrangement is configured to determine whether the identified active channel(s) constitute a valid channel configuration.

8. The apparatus of claim 5, wherein the circuit arrangement is configured to store a value associated with the power signal at each carrier frequency.

9. The apparatus of claim 5, wherein the circuit arrangement is further configured to suppress the IMD products by tuning the scanning receiver to the identified portion of the frequency band, monitoring the power signal when the scanning receiver is tuned to the identified portion of the frequency band, and adjusting at least one of a phase and magnitude of a suppression signal applied to the signal path so as to reduce the signal power in the signal path within the identified portion of the frequency band.

10. The apparatus of claim 5, wherein the circuit arrangement is further configured to identify a plurality of portions of the frequency band likely to include IMD products, and to suppress the IMD products by tuning the scanning receiver to each identified portion of the frequency band, monitoring the power signal when the scanning receiver is tuned to such identified portion of the frequency band, and adjusting at least one of a phase and magnitude of a suppression signal applied to the signal path so as to reduce the signal power in the signal path within the plurality of identified portions of the frequency band.

11. The apparatus of claim 1, wherein the RF communications signal comprises a multi-carrier communications signal.

12. The apparatus of claim 1, wherein the at least one active channel includes first and second channels respectively associated with respectively associated with first and second carrier frequencies, and wherein the circuit arrangement is configured to determine the identified portion of the frequency band by performing a calculation selected from the group consisting of subtracting a spectral distance between the first and second carrier frequencies from the first carrier frequency and adding the spectral distance between the first and second carrier frequencies to the second carrier frequency.

13. The apparatus of claim 1, wherein the at least one active channel includes first and second channels, wherein the first and second channels are respectively associated with first and second carrier frequencies, and wherein the circuit arrangement is configured to determine the identified portion of the frequency band by accessing a lookup table indexed by the first and second carrier frequencies.

14. The apparatus of claim 1, wherein the RF communications signal comprises a multi-carrier signal, the apparatus further comprising:

(a) a power amplifier disposed in the signal path and configured to output a multi-carrier output signal; and

(b) a feed forward signal path coupled in parallel with the signal path;

wherein the circuit arrangement is configured to generate a suppression signal in the feed forward signal path that, when combined with the multi-carrier output signal generated by the power amplifier, reduces the IMD products in the multi-carrier output signal.

15. A power amplifier, comprising:

(a) an amplifier circuit disposed in a main signal path and configured to amplify an RF input signal disposed in a frequency band to generate an RF output signal;

(b) a scanning receiver coupled to the main signal path and configured to monitor power on the signal path in a controlled portion of the frequency band; and

(c) a control circuit disposed in a feed forward path and configured to generate a suppression signal that, when combined with the RF output signal, suppresses intermodulation distortion (IMD) products disposed in a selected portion of the frequency band, the control circuit configured to, in a first mode, control the scanning receiver to identify at least one active channel among a plurality of channels in the frequency band, and, in a second mode, to control the scanning receiver to monitor IMD products in the selected portion of the frequency band, wherein the selected portion of the frequency band is associated with the active channel(s) identified by the scanning receiver.

16. The power amplifier of claim 15, wherein the control circuit is configured to identify each active channel by detecting an active signal at a carrier frequency associated with such active channel.

17. The power amplifier of claim 15, wherein the control circuit is configured to sequentially tune the scanning receiver to each of a plurality of carrier frequencies, compare the power signal output by the scanning receiver at each carrier frequency to a threshold, and identify an active channel among the plurality of channels based upon the comparison of the power signal output by the scanning receiver when tuned to a carrier frequency associated with such active channel to the threshold.

18. The power amplifier of claim 15, wherein the RF input signal comprises a multi-carrier communications signal.

19. The power amplifier of claim 15, wherein the at least one active channel includes first and second channels respectively associated with first and second carrier frequencies, and wherein the control circuit is configured to determine the selected portion of the frequency band by performing a calculation selected from the group consisting of subtracting a spectral distance between the first and second carrier frequencies from the first carrier frequency and adding the spectral distance between the first and second carrier frequencies to the second carrier frequency.

20. The power amplifier of claim 15, wherein the at least one active channel includes first and second channels, wherein the first and second channels are respectively associated with first and second carrier frequencies, and wherein the control circuit is configured to determine the selected portion of the frequency band by accessing a lookup table indexed by the first and second carrier frequencies.

21. A power amplifier, comprising:

(a) an amplifier circuit disposed in a main signal path and configured to amplify an RF input signal disposed in a frequency band to generate an RF output signal;

(b) a scanning receiver coupled to the main signal path and configured to detect an output level of the RF output signal in a selected portion of the frequency band; and

(c) a control circuit coupled to receive the detected output level from the scanning receiver, the control circuit further configured to control the scanning receiver to select as the selected portion of the frequency band each of a plurality of channels in the frequency band so as to generate a power signal representative of an output level of the RF output signal in each of the plurality of channels.

22. A circuit arrangement for use in a feed forward, multi-carrier power amplifier system to suppress intermodulation distortion (IMD) products from an RF communications signal, the circuit arrangement comprising:

(a) a mixer for downconverting an RF carrier signal to an intermediate frequency (IF) signal, wherein the RF carrier signal is disposed at a channel among a plurality of channels in a frequency band, each channel associated with a carrier frequency;

(b) a filter responsive to the IF signal and configured to pass only a predetermined portion of the IF signal;

(c) a detector responsive to the predetermined portion of the IF signal passed by the filter, the detector configured to generate a power signal representative of the power of the portion of the IF signal passed by the filter; and

(d) a processing unit configured to generate a suppression signal that suppresses IMD products from the RF communications signal responsive to the power signal.

23. The circuit arrangement of claim 22, wherein the filter comprises a SAW bandpass filter.

24. The circuit arrangement of claim 22, wherein the detector comprises a log detector.

25. The circuit arrangement of claim 22, wherein the processing unit comprises a lookup table identifying at least one IMD location associated with at least first and second carrier frequencies located in at least first and second channels.

26. The circuit arrangement of claim 22, wherein the RF communications signal is modulated according to one of a WCDMA and CDMA modulation format.

27. A method of suppressing intermodulation distortion (IMD) products in an RF communication system operating within a frequency band, the method comprising:

(a) analyzing an RF communications signal communicated by a signal path in the RF communication system to identify at least one active channel among a plurality of channels in the frequency band;

(b) identifying at least one portion of the frequency band likely to include IMD products based upon the identified active channel(s); and

(c) suppressing from the RF communications signal the IMD products at the identified portion of the frequency band.

28. The method of claim 27, wherein the plurality of channels in the frequency band are each associated with a non-varying carrier frequency.

29. The method of claim 27, wherein the frequency band is the Universal Mobile Telecommunications System (UMTS) frequency band.

30. The method of claim 27, wherein identifying the at least one active channel includes detecting an active signal at a carrier frequency associated with an active channel.

31. The method of claim 30, wherein identifying the at least one active channel includes:

(a) tuning a scanning receiver coupled to the signal path to a selected carrier frequency; and

(b) receiving a power signal output by the scanning receiver and representative of a signal power in the signal path at the selected carrier frequency.

32. The method of claim 31, wherein tuning the scanning receiver includes sequentially tuning the scanning receiver to each of a plurality of carrier frequencies, the method further comprising:

(a) comparing the power signal output by the scanning receiver at each carrier frequency to a threshold; and

(b) identifying an active channel among the plurality of channels based upon the comparison of the power signal output by the scanning receiver when tuned to a carrier frequency associated with such active channel to the threshold.

33. The method of claim 31, further comprising determining whether the identified active channel(s) constitute a valid channel configuration.

34. The method of claim 31, further comprising storing a value associated with the power signal at each carrier frequency.

35. The method of claim 31, wherein suppressing the IMD products includes:

(a) tuning the scanning receiver to the identified portion of the frequency band;

(b) monitoring the power signal when the scanning receiver is tuned to the identified portion of the frequency band; and

(c) adjusting at least one of a phase and magnitude of a suppression signal applied to the signal path so as to reduce the signal power in the signal path within the identified portion of the frequency band.

36. The method of claim 35, further comprising:

(a) identifying a plurality of portions of the frequency band likely to include IMD products; and

(b) suppressing the IMD products by tuning the scanning receiver to each identified portion of the frequency band, monitoring the power signal when the scanning receiver is tuned to such identified portion of the frequency band, and adjusting at least one of a phase and magnitude of a suppression signal applied to the signal path so as to reduce the signal power in the signal path within the plurality of identified portions of the frequency band.

37. The method of claim 27, wherein the RF communications signal comprises a multi-carrier communications signal.

38. The method of claim 27, wherein the at least one active channel includes first and second channels respectively associated with first and second carrier frequencies, and wherein identifying the identified portion of the frequency band includes performing a calculation selected from the group consisting of subtracting a spectral distance between the first and second carrier frequencies from the first carrier frequency, and adding the spectral distance between the first and second carrier frequencies to the second carrier frequency.

39. The method of claim 27, wherein the at least one active channel includes first and second channels respectively associated with first and second carrier frequencies, and wherein identifying the identified portion of the frequency band includes accessing a lookup table indexed by the first and second carrier frequencies.

40. The method of claim 27, wherein the RF communication system includes a multi-carrier power amplifier disposed in the signal path and configured to output a multi-carrier output signal, and a feed forward signal path coupled in parallel with the signal path, and wherein suppressing the IMD products includes generating a suppression signal in the feed forward signal path that, when combined with the multi-carrier output signal generated by the power amplifier, reduces the IMD products in the multi-carrier output signal.